

CODE-SWITCHING, BORROWING, AND LINGUISTIC DILUTION: CONTACT-INDUCED CHANGE IN DAWOODI

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Abstract

This paper examines the impact of sustained language contact on Dawoodi, focusing on patterns of code-switching, lexical borrowing, and structural convergence. Utilizing a corpus-assisted discourse analysis approach, the study analyzes recorded conversations, narrative data, and spontaneous speech samples across generational cohorts within the Dawoodi-speaking community of Mominabad, Hunza. Building on a longitudinal research program that has documented language shift, lexical attrition, structural collapse, and linguistic hegemony in this community (Ishfaq & Bhatti, 2019; 2020; 2021; 2022), the present study examines the contact-induced mechanisms through which these processes unfold at the level of everyday language use. The findings reveal a high frequency of lexical borrowing from Urdu, Burushaski, and Shina, accompanied by phonological and syntactic convergence, particularly among younger speakers. These processes are theorized as forms of linguistic dilution, wherein the structural distinctiveness of Dawoodi is progressively eroded through sustained contact with dominant languages. However, the study resists a purely decrement list interpretation. It argues that code-switching and borrowing also function as adaptive communicative strategies that reflect speakers' navigation of complex multilingual identities and socio-economic realities. The generational variation documented in the data reveals a spectrum from relatively stable borrowing in elder speech to deeply hybridized forms among younger semi-speakers. By situating Dawoodi within broader theoretical debates on language contact, hybridity, and endangerment, the paper contributes to nuanced understanding of contact-induced change as simultaneously adaptive and erosive. It calls for documentation methodologies that capture these dynamic, living processes rather than idealized forms, and for theoretical frameworks that hold the tension between resilience and decline.

Keywords: code-switching, lexical borrowing, linguistic dilution, language contact, Dawoodi language, corpus-assisted discourse analysis, hybridity, contact-induced change, language endangerment, structural convergence

1. Introduction

1.1 Introduction

Languages that exist in sustained contact with more powerful neighbors are never static. They absorb, adapt, negotiate, and sometimes dissolve. The processes through which languages change under contact conditions — borrowing lexical items, converging syntactically, alternating between codes within a single utterance — are among the most extensively studied phenomena in sociolinguistics. Yet their interpretation remains contested. Are these processes evidence of a language's vitality, its capacity to adapt and survive? Or are they symptoms of erosion, early signs of a trajectory toward replacement and loss? In the case of Dawoodi, a critically endangered contact language spoken in the Mominabad area of the Hunza region in northern Pakistan, this tension is particularly urgent and theoretically productive.

Dawoodi exists within one of the most linguistically complex ecologies in South Asia, in sustained contact with Urdu, Burushaski, Shina, and Wakhi, each of which exerts pressure on Dawoodi's lexical, phonological, and syntactic systems in different ways and to different degrees. Previous research in this longitudinal series has established the broad contours of Dawoodi's situation: advanced language shift with the breakdown of intergenerational transmission (Ishfaq & Bhatti,

2019); systematic lexical attrition involving not only vocabulary reduction but semantic flattening and loss of cultural nuance (Ishfaq & Bhatti, 2020); structural disintegration theorized through the concept of post-creole collapse (Ishfaq & Bhatti, 2021); and the ideological and institutional conditions of linguistic hegemony that produce and sustain these processes (Ishfaq & Bhatti, 2022). What has not yet been examined in dedicated detail is the micro-level contact-induced mechanism through which these macro-level outcomes are produced: the actual patterns of code-switching, borrowing, and convergence that characterize Dawoodi speech as it is used, adapted, and transformed in everyday interaction.

This paper addresses that gap. It examines how Dawoodi speakers, across different generations and levels of competence, negotiate the boundaries between Dawoodi and the languages that surround it, and how these negotiations are reshaping the language from within. In doing so, it engages with a fundamental question in contact linguistics: at what point does adaptive borrowing become structural erosion.

1.2 Background of the Study

The Dawoodi-speaking community is embedded within a multilingual ecology that Weinreich (1953) would recognize as a prototypical contact situation: geographically circumscribed, economically marginal, and exposed to multiple languages of greater social prestige and institutional power. Historically, Dawoodi emerged as a contact language itself, with origins in processes of pidginization and subsequent creolization that produced a structurally distinct system with its own grammatical resources and expressive capacities (Ishfaq & Bhatti, 2021). This history means that Dawoodi's relationship with contact is constitutive rather than merely circumstantial; it is a language that was born from contact and has continued to be shaped by it throughout its existence.

What has changed in recent decades is the nature and directionality of that contact. Whereas earlier contact processes involved relative equilibrium among several regional languages, the contemporary situation is characterized by radical asymmetry. The penetration of Urdu as the national language through education, administration, and media, combined with the socio-economic pressures that reward fluency in dominant languages (Bourdieu, 1991), has transformed contact from a bilateral to a largely unilateral process in which Dawoodi absorbs from dominant languages without any corresponding absorption in the other direction.

As documented in earlier research, this asymmetric contact has produced a situation in which younger speakers exhibit qualitatively different linguistic behavior from their elders: more borrowing, more code-switching, less facility with culturally embedded vocabulary, and increasing difficulty producing sustained, structurally coherent Dawoodi discourse (Ishfaq & Bhatti, 2020). The present study examines these patterns in systematic detail, drawing on corpus data to identify the frequency, domains, and structural characteristics of contact-induced change in Dawoodi speech across generations.

1.3 Statement of the Problem

Despite its centrality to the processes of decline documented in earlier research, contact-induced change in Dawoodi has not been examined through dedicated corpus-based analysis. The existing literature has noted borrowing and code-switching as features of language shift (Ishfaq & Bhatti, 2019) and lexical attrition (Ishfaq & Bhatti, 2020), and has identified linguistic dilution as a consequence of contact (Ishfaq & Bhatti, 2021), but the mechanisms of these processes — their frequency, structural patterns, generational variation, and functional dimensions — have not been systematically investigated. This is a significant gap. Understanding how contact-induced change

operates at the micro-level is essential both for theoretical accounts of language endangerment and for practical preservation efforts. If borrowing and code-switching are understood only as symptoms of decline, documentation and revitalization efforts may focus on eliminating or reversing them. If they are understood also as adaptive strategies that reflect speaker agency and communicative creativity, they must be approached differently, as dynamic features of living language use that deserve to be captured and understood on their own terms.

1.4 Research Objectives

1. To document and analyze patterns of lexical borrowing in Dawoodi speech across generational cohorts.
2. To examine the structural characteristics of code-switching in Dawoodi, including its distributional patterns and functional motivations.
3. To assess the extent and nature of phonological and syntactic convergence in Dawoodi toward dominant contact languages.
4. To theorize contact-induced change in Dawoodi within frameworks of linguistic dilution, hybridity, and adaptive resilience.

1.5 Research Questions

1. What patterns of lexical borrowing are observable in Dawoodi speech, and how do these patterns vary across generational cohorts?
2. What structural and functional characteristics define code-switching behavior in the Dawoodi community, and how does this vary by generation and domain?
3. To what extent has sustained contact with dominant languages produced phonological and syntactic convergence in Dawoodi?
4. How can contact-induced change in Dawoodi be theorized in a way that captures both its adaptive and its erosive dimensions?

1.6 Significance of the Study

This study is significant at multiple levels. It completes an important dimension of the longitudinal research program on Dawoodi by providing micro-level empirical grounding for the macro-level processes of shift, attrition, and collapse documented in earlier work. Where previous studies established what was happening to the language at the structural and social levels, this study examines how those transformations are enacted in the moment-by-moment practices of everyday speech. Theoretically, the study contributes to broader debates in contact linguistics by applying established frameworks — including Myers-Scotton's (1993; 2002) Matrix Language Frame model, Thomason and Kaufman's (1988) borrowing scale, and Mufwene's (2001) ecological approach — to an endangered creole language in a South Asian multilingual ecology. This application extends these frameworks in ways that may be productive beyond the specific Dawoodi context. From a practical standpoint, the study has implications for how documentation and revitalization efforts are designed. By demonstrating that contact-induced changes are not simply errors or corruptions but reflect systematic patterns of speaker behavior, it advocates for documentation methodologies that capture language as it is actually used rather than as idealized norms prescribe it should be.

1.7 Scope of the Study

This study focuses on the contact-induced dimensions of linguistic change in Dawoodi, with particular attention to lexical borrowing, code-switching, and structural convergence. It draws on corpus data from recorded speech across generational cohorts and complements this quantitative analysis with qualitative interpretation of the functional and social meanings of contact-induced

practices. The study is situated as the fifth article in a longitudinal research program and should be read in dialogue with the earlier studies that provide its foundational context (Ishfaq & Bhatti, 2019; 2020; 2021; 2022).

2. Literature Review

2.1 Introduction

The study of language contact has produced some of the richest and most contested theoretical terrain in linguistics. From Weinreich's (1953) foundational account of interference and borrowing to contemporary debates on translanguaging and hybridity, the field has continually grappled with the question of what happens when languages come into sustained contact and how the outcomes of that contact should be understood. This chapter reviews the key theoretical and empirical literature relevant to understanding contact-induced change in Dawoodi, situating the present study within established frameworks while identifying the specific contributions it makes.

2.2 Language Contact and Borrowing

Weinreich (1953) established the foundational distinction between interference, the transfer of features from one language to another in the speech of bilinguals, and borrowing, the adoption of elements from one language into another at the community level. This distinction, while useful analytically, has been complicated by subsequent research demonstrating that the two processes are intimately connected: community-level borrowing typically originates in individual speaker behavior and gradually becomes conventionalized (Thomason & Kaufman, 1988).

Thomason and Kaufman's (1988) influential work on language contact and language change provides a borrowing scale that maps the relationship between intensity of contact and the types of features that are transferred. At lower intensities of contact, borrowing is primarily lexical, involving the adoption of content words, particularly nouns, from the source language. As contact intensifies, grammatical features may also be borrowed, including phonological patterns, morphological categories, and syntactic structures. In extreme cases of contact, particularly in situations of language shift, structural convergence may extend to fundamental grammatical categories.

In the Dawoodi context, the evidence from earlier research is consistent with high-intensity contact. Lexical borrowing is pervasive and increasingly extends to grammatical vocabulary, while phonological and syntactic patterns show influence from dominant contact languages, particularly Urdu (Ishfaq & Bhatti, 2019; 2020). The present study examines these patterns in systematic detail for the first time.

2.3 Code-Switching: Theoretical Frameworks

Code-switching, the alternation between two or more languages or language varieties within a single conversation or utterance, has been extensively theorized from both structural and socio-pragmatic perspectives. Myers-Scotton's (1993) Matrix Language Frame model provides a structural account, arguing that in bilingual speech, one language typically functions as the Matrix Language that sets the morphosyntactic frame of the utterance, while the other functions as the Embedded Language, contributing lexical items and occasionally phrase-level structures within that frame.

This model is particularly relevant for analyzing Dawoodi speech, where earlier observations suggest that Dawoodi may increasingly function as the Embedded Language in utterances whose morphosyntactic frame is set by Urdu, a reversal of what would be expected in healthy bilingual speech and a potential indicator of advanced language shift (Ishfaq & Bhatti, 2019). The present

study examines whether this pattern is consistent across the corpus and how it varies across generations.

From a socio-pragmatic perspective, Gumperz (1982) demonstrated that code-switching is not random but is governed by social and communicative norms that reflect the meanings speakers attach to different codes. Myers-Scotton (1993) extended this insight through the Markedness Model, arguing that code choice communicates social meanings, with marked choices carrying specific pragmatic force and unmarked choices reflecting routine expectations. In endangered language communities, the markedness of code choices often shifts over time as the heritage language loses ground in more and more domains.

More recently, translanguaging frameworks (García & Wei, 2014) have challenged the assumption that languages are discrete, separable systems, arguing instead that multilingual speakers draw on a unified linguistic repertoire whose components are not neatly bounded. This perspective has important implications for the study of endangered languages, suggesting that apparent mixing and switching may reflect fluid repertoire use rather than failure to maintain separate codes.

2.4 Linguistic Dilution and Structural Erosion

The concept of linguistic dilution captures the process through which sustained contact with dominant languages progressively erodes the structural distinctiveness and expressive autonomy of a minority language. This concept has been invoked in earlier research on Dawoodi to describe how borrowing and code-switching contribute to the language's loss of internal integrity (Ishfaq & Bhatti, 2019; 2021), and it builds on Thomason and Kaufman's (1988) account of how high-intensity contact can lead to structural simplification and convergence.

Mufwene (2001) offers a complementary perspective through his ecological approach to language evolution, which emphasizes that languages are not autonomous systems but are shaped by the conditions of their social environments. In contexts where one language is ecologically dominant — where it is used in more domains, by more people, with greater institutional support — it exerts selection pressure on minority languages, favoring features that facilitate convergence and penalizing features that maintain distinctiveness. Over time, this ecological pressure produces structural change that can be understood as a form of gradual replacement.

The distinction between dilution as erosion and dilution as adaptation is theoretically significant. Auer (1999) argues that what appears as structural erosion from a purist perspective may represent functional adaptation from a speaker-oriented perspective: hybrid forms that emerge from contact may be more communicatively efficient for speakers who navigate multiple linguistic worlds simultaneously. This tension between erosion and adaptation is central to the present study's analytical framework.

2.5 Generational Variation and Hybrid Forms

One of the most consistent findings across the sociolinguistics of language contact and shift is that generational variation provides a window into ongoing language change. Younger speakers in shifting communities typically exhibit more borrowing, more code-switching, and more convergence with dominant languages than their elders, reflecting both reduced exposure to the heritage language and stronger orientation toward dominant linguistic norms (Dorian, 1981; Grenoble & Whaley, 2006).

The concept of the semi-speaker, introduced by Dorian (1981), is particularly relevant here. Semi-speakers possess incomplete competence in the heritage language, characterized by reduced lexical range, simplified morphology, and reliance on dominant-language structures, but they are not simply failed speakers of the heritage language. Rather, they speak a variety of that language that

reflects their particular sociolinguistic situation, combining elements of the heritage language with elements of dominant languages in ways that are systematic, if different from elder speaker norms. In the Dawoodi context, earlier research has confirmed the existence of semi-speaker profiles among younger community members, with corpus data showing significantly reduced type-token ratios and higher borrowing rates compared to elder speakers (Ishfaq & Bhatti, 2020). The present study extends this analysis by examining the structural characteristics of the hybrid forms produced by younger speakers, asking not only how much borrowing occurs but what the borrowed elements are, where they are inserted in the syntactic structure, and what communicative functions they serve.

2.6 Hybridity, Resilience, and the Politics of Contact

The theoretical literature on hybridity offers a productive counterpoint to deficit-oriented accounts of contact-induced change. Bhabha's (1994) influential concept of hybridity in postcolonial theory, while not specifically linguistic, illuminates how the mixing of dominant and subordinate cultural forms can produce new, creative syntheses that resist rather than simply reproduce relations of domination. Applied to language contact, this perspective invites attention to the ways in which hybrid linguistic forms may embody speaker creativity and resistance as well as structural vulnerability.

Canagarajah (2013) has argued in the context of World Englishes and translanguaging that the mixing of linguistic resources should be understood as a communicative skill rather than a deficiency. Speakers who code-switch fluidly and create hybrid forms are demonstrating metalinguistic sophistication and navigating complex social terrain rather than failing to maintain linguistic boundaries. This perspective does not deny that contact-induced change may contribute to language endangerment at the community level, but it insists on recognizing the agency and creativity of individual speakers within those macro-level processes.

For the study of Dawoodi, this perspective is valuable because it allows for an analysis that is simultaneously honest about the erosive dimensions of contact-induced change and respectful of the communicative practices of community members. The hybrid forms documented in Dawoodi speech are not simply symptoms of decline; they are evidence of how speakers are living in and through a situation of profound linguistic inequality.

2.7 Research Gap

Existing research on Dawoodi has noted the role of borrowing and code-switching in language shift and attrition but has not subjected these processes to systematic corpus-based analysis. The mechanisms, frequency, structural patterns, and functional dimensions of contact-induced change in Dawoodi remain underexplored. The present study addresses this gap by providing the first dedicated, corpus-assisted examination of code-switching, borrowing, and structural convergence in Dawoodi speech, contributing both to the empirical record on Dawoodi and to theoretical discussions in contact linguistics more broadly.

3. Methodology

3.1 Introduction

This chapter outlines the methodological framework adopted to investigate contact-induced change in Dawoodi. The study employs a corpus-assisted discourse analysis (CADA) approach that integrates quantitative corpus methods with qualitative discourse analysis, enabling the identification of systematic patterns in language use while also attending to their communicative and social meanings. This methodological orientation is consistent with the mixed-methods tradition established in earlier research in this series (Ishfaq & Bhatti, 2019; 2020; 2021) while

extending it with specific tools and analytical procedures appropriate to the study of code-switching and borrowing.

3.2 Research Design and Philosophical Orientation

The study is grounded in a pragmatic research paradigm that prioritizes methodological flexibility and problem-oriented inquiry (Creswell, 2014; Tashakkori & Teddlie, 2010). The research design is both synchronic and diachronically informed: synchronic in that it analyzes patterns of contact-induced change in contemporary Dawoodi speech, and diachronically informed in that these patterns are interpreted against the background of earlier research documenting the trajectory of the language over time.

The corpus-assisted discourse analysis framework employed here reflects the methodological principles established by Partington, Duguid, and Taylor (2013), which emphasize the need to move from quantitative corpus patterns to contextually grounded qualitative interpretation. Corpus findings are treated not as self-explanatory but as starting points for interpretive analysis that considers the social meanings and communicative functions of the linguistic patterns identified.

3.3 Corpus Construction

The primary dataset consists of a purpose-built corpus of transcribed Dawoodi speech, drawing on recordings collected from three generational cohorts: elder fluent speakers (60+ years), middle-generation speakers (30–59 years), and younger semi-speakers (under 30 years). This tripartite generational structure, established in earlier research (Ishfaq & Bhatti, 2019), enables systematic comparison of contact-induced change across the lifespan of the community.

Speech samples were collected through naturalistic recording of spontaneous conversations, elicited narratives on culturally significant topics, and task-based interactions designed to elicit specific lexical domains. The inclusion of multiple speech types ensures that the corpus captures variation across communicative contexts, from informal domestic interaction to more formal narrative production.

The corpus was prepared following standard corpus compilation procedures: audio data was transcribed using established orthographic conventions, transcriptions were cleaned to remove disfluencies and transcription errors, and the finalized corpus was formatted for analysis using Sketch Engine and AntConc. Language identification tagging was applied to enable systematic identification and analysis of borrowed and switched elements.

3.4 Analytical Procedures

Corpus analysis was conducted using Sketch Engine (Kilgarriff et al., 2014) for frequency analysis, keyword identification, and collocation patterns, and AntConc (Anthony, 2019) for concordance analysis and lexical patterning. Quantitative measures included: borrowing rate (ratio of borrowed lexical items to total tokens), type-token ratio as an indicator of lexical diversity, frequency distribution of borrowed items by source language and lexical category, and distribution of code-switching instances by structural position within the utterance.

Qualitative discourse analysis was applied to selected extracts to examine the functional dimensions of code-switching and borrowing, including their pragmatic motivations, the social meanings they communicate, and their relationship to speaker identity and domain. Myers-Scotton's (1993; 2002) Matrix Language Frame model was applied to code-switching instances to determine which language functions as the grammatical matrix and whether this varies across generations. Critical discourse analysis (Fairclough, 1992; van Dijk, 1993) was employed to examine how ideological dimensions of language contact — the prestige of dominant languages, the stigma of heritage varieties — are manifest in speaker practices.

3.5 Sampling and Participants

Participants were selected using purposive sampling to ensure representation across generational groups, levels of linguistic competence, and gender. The sample includes twelve elder fluent speakers, fifteen middle-generation speakers, and eighteen younger speakers, consistent with the corpus composition established in earlier research (Ishfaq & Bhatti, 2020). Snowball sampling was employed to identify additional participants with relevant profiles, consistent with established practices in sociolinguistic research with small endangered language communities (Milroy & Gordon, 2003).

3.6 Validity, Reliability, and Ethical Considerations

Validity was enhanced through triangulation across data types (spontaneous speech, elicited narratives, task-based interactions) and analytical methods (quantitative corpus analysis, qualitative discourse analysis). Corpus verification procedures were applied to minimize transcription errors and ensure consistency of language identification tagging.

Ethical considerations follow the principles established in earlier research in this series. Informed consent was obtained from all participants. Participants' identities are protected throughout. The research recognizes that linguistic data constitutes cultural heritage and is conducted with sensitivity to community ownership and dignity.

4. Data Analysis and Findings

4.1 Introduction

This chapter presents the corpus-based findings on code-switching, borrowing, and structural convergence in Dawoodi, organized around the key analytical dimensions identified in the methodology. Quantitative patterns are presented first, providing the empirical foundation for the qualitative interpretation that follows. The findings are interpreted within the theoretical frameworks outlined in the literature review and situated within the broader longitudinal context established by earlier research in this series.

4.2 Overview of Borrowing Patterns

Corpus analysis reveals a substantial and systematically patterned presence of borrowed elements across all generational cohorts, with significant variation in frequency and type by generation. Table 4.1 presents summary borrowing statistics across the three cohorts.

Table 4.1: Borrowing Rates by Generational Cohort

Measure	Elder Speakers	Middle Speakers	Younger Speakers
Total Tokens	18,500	15,300	12,200
Borrowed Tokens	1,480	2,142	2,684
Borrowing Rate (%)	8.0	14.0	22.0
Borrowed Types	312	498	641
Primary Source Language	Burushaski	Urdu	Urdu
Secondary Source Language	Shina	Burushaski	Burushaski/Shina
Total Tokens	18,500	15,300	12,200

The progressive increase in borrowing rate across generations — from 8% among elder speakers to 22% among younger speakers — is consistent with the trajectory of contact-induced change documented in earlier research. However, the data reveals not only quantitative increase but qualitative shift: elder speakers borrow predominantly from regional contact languages

(Burushaski and Shina), reflecting longstanding patterns of regional multilingualism, while younger speakers borrow predominantly from Urdu, reflecting the penetration of the national language through education and media.

4.3 Lexical Borrowing: Domains and Patterns

Detailed analysis of borrowed lexical items reveals domain-specific patterns of borrowing that illuminate the relationship between social change and linguistic change. Borrowing is not evenly distributed across semantic fields but is concentrated in specific domains that reflect points of contact between traditional Dawoodi life and the wider social world.

The domains of highest borrowing concentration include education and formal literacy, technology and modern material culture, administration and civic life, and commerce and economic activity. These domains correspond precisely to those in which Dawoodi has been excluded from institutional use and in which dominant languages, particularly Urdu, function as the primary medium of engagement. As documented in earlier research on lexical attrition, these are also domains in which culturally embedded Dawoodi vocabulary has been most severely eroded (Ishfaq & Bhatti, 2020).

In contrast, borrowing rates are lower in domains associated with traditional cultural practice, kinship organization, and domestic life, though the comparison with elder speaker data reveals that even in these traditionally strong domains, borrowing is increasing among younger speakers. The kinship system, which elder speakers encode with a rich system of differentiated Dawoodi terms, is increasingly rendered in younger speech through borrowed Urdu equivalents that flatten the semantic distinctions encoded in the native system, consistent with the semantic narrowing and flattening documented in Ishfaq and Bhatti (2020).

Table 4.2 illustrates this domain-specific pattern with representative examples:

Table 4.2: Domain-Specific Borrowing Patterns (Illustrative Examples)

Domain	Elder Usage	Younger Usage	Source Language
Kinship	Native Dawoodi differentiated terms	Generalized Urdu equivalents	Urdu
Traditional Occupations	Native Dawoodi terms retained	Urdu or Shina replacements	Urdu/Shina
Education	Occasional Urdu loanwords	Near-total Urdu dominance	Urdu
Oral Narrative Formulae	Native Dawoodi preserved	Mixed or replaced	Urdu/Burushaski
Administrative Terminology	Limited native terms	Urdu throughout	Urdu
Domain	Elder Usage	Younger Usage	Source Language
Kinship	Native Dawoodi differentiated terms	Generalized Urdu equivalents	Urdu

4.4 Code-Switching: Structural Analysis

Beyond lexical borrowing, the corpus reveals extensive code-switching, defined here as the alternation between Dawoodi and one or more contact languages at the phrase level or above. Code-switching is substantially more frequent in younger speech than in elder speech, occurring

in approximately 31% of utterance boundaries in younger speaker data compared to 9% in elder speaker data.

Application of Myers-Scotton's (1993) Matrix Language Frame model to the code-switching data reveals a significant generational difference in the structural role of Dawoodi. In elder speaker data, Dawoodi consistently functions as the Matrix Language, setting the morphosyntactic frame of utterances while Burushaski and Shina elements are inserted as Embedded Language items within that frame. In middle-generation speaker data, this pattern is less consistent, with instances where Urdu begins to function as the matrix for stretches of discourse.

In younger speaker data, a more complex pattern emerges. While Dawoodi morphosyntax remains detectable as a matrix in some utterances, particularly in domestic and culturally specific contexts, there are frequent instances where Urdu functions as the morphosyntactic matrix and Dawoodi elements are inserted as embedded items. This reversal — Dawoodi moving from Matrix to Embedded Language status — is a significant structural indicator of advanced language shift, consistent with Myers-Scotton's (2002) model of language shift as a process in which the heritage language progressively loses Matrix Language status.

4.5 Phonological and Syntactic Convergence

Beyond lexical borrowing and code-switching, the corpus provides evidence of deeper structural convergence between Dawoodi and dominant contact languages. Phonological analysis of younger speaker data reveals reduction or loss of Dawoodi-specific phonological contrasts, with substitution of Urdu phonological patterns in positions where Dawoodi and Urdu diverge. Phonological features that are absent from Urdu are particularly vulnerable, as younger speakers whose primary phonological model is Urdu lack the productive knowledge of these features.

At the syntactic level, the data reveals increased use of Urdu-influenced word order patterns in younger speech. Dawoodi's syntactic properties, including its characteristic argument structure and verb-final tendencies, are preserved more consistently in elder speech than in younger speech, where Urdu-influenced structures appear with increasing frequency. These syntactic changes are not yet categorical but represent an incremental shift in the probability distribution of structural options, consistent with Mufwene's (2001) ecological account of structural change as the outcome of shifting selection pressures.

4.6 Code-Switching as Adaptive Strategy

A crucial dimension of the analysis concerns the functional interpretation of code-switching in the Dawoodi community. Qualitative analysis of code-switching instances in context reveals that not all switching is equivalent in its motivations or meanings. Several distinct functional patterns emerge from the data.

Topic-related switching is common, with speakers shifting into Urdu when discussing domains (education, administration, technology) that are primarily conducted through Urdu in their daily lives, and returning to Dawoodi for culturally embedded topics. This pattern reflects the domain distribution of the two languages rather than any inability to use Dawoodi.

Identity-marking switching is also evident, particularly in middle-generation speech, where speakers shift codes to mark different aspects of their social identities — shifting into Dawoodi to signal community membership and cultural continuity, and into Urdu to signal educated status or social mobility. This identity-marking function of code-switching, consistent with Gumperz's (1982) account of conversational code-switching, represents a form of speaker agency in which contact between languages is exploited for communicative purposes rather than simply undergone.

However, the data also reveals what may be characterized as competence-driven switching, particularly in younger speaker speech, where code-switching appears to occur not from pragmatic choice but from inability to locate a Dawoodi lexical item or construct a Dawoodi structure. These instances are distinguishable from strategic switching by hesitation patterns, self-repair sequences, and the structural positions in which switching occurs, often mid-clause rather than at conversationally motivated boundaries. Competence-driven switching is significantly more frequent in younger than in elder or middle-generation speech and is consistent with the semi-speaker profiles documented in earlier research (Ishfaq & Bhatti, 2020).

4.7 Generational Profiles of Hybrid Language Use

The three generational cohorts produce qualitatively distinct hybrid language profiles that reflect their different positions in the trajectory of language change.

Elder speakers produce speech that is predominantly Dawoodi in its morphosyntactic frame, with selective borrowing that is primarily from Burushaski and Shina (reflecting traditional regional multilingualism) and relatively infrequent switching into Urdu. When elder speakers code-switch, it is typically at domain boundaries or for identity-marking purposes that are communicatively motivated. Their speech reflects a linguistic repertoire in which Dawoodi remains the dominant and structurally primary code.

Middle-generation speakers produce more hybrid speech, with higher borrowing rates from Urdu and more frequent code-switching. The Matrix Language status of Dawoodi is less consistently maintained. However, this generation retains substantial Dawoodi structural competence and often demonstrates metalinguistic awareness of the contact-induced changes in their own and others' speech, commenting on borrowings or code-switches in ways that reflect their position at the intersection of two language regimes.

Younger speakers produce the most hybridized speech in the corpus. Their language is characterized by high Urdu borrowing rates, frequent competence-driven switching, significant phonological convergence toward Urdu, and instances where Urdu functions as the morphosyntactic matrix. At the same time, Dawoodi elements remain present, and in certain domains and interactional contexts, younger speakers demonstrate knowledge of Dawoodi vocabulary and structures that suggests the language has not been entirely abandoned. This partial, domain-restricted, hybridized Dawoodi represents the current state of the language as it is actively used by those who will determine its future.

4.8 Linguistic Dilution as Process and Outcome

The findings presented in this chapter support and empirically ground the concept of linguistic dilution introduced in earlier research (Ishfaq & Bhatti, 2021). Linguistic dilution is not a single event but an ongoing process, visible in the corpus as a gradient from elder speech (relatively undiluted) through middle-generation speech (moderately diluted) to younger speech (heavily diluted). This gradient is produced by the cumulative effect of lexical borrowing, code-switching, and structural convergence operating across generations in conditions of asymmetric language contact.

Crucially, however, the findings also support the argument made in the introduction of this paper: that dilution is not simply erosion. The corpus contains numerous instances of creative, adaptive, communicatively rich code-switching that demonstrates speaker competence rather than deficiency. The hybrid forms produced by younger Dawoodi speakers are not failed attempts at

pure Dawoodi but functional communicative systems that reflect these speakers' multilingual realities. Recognizing this is not to minimize the existential threat that linguistic dilution poses to Dawoodi's structural integrity; it is to ensure that the response to that threat is calibrated to the actual situation of the language and its speakers.

5. Discussion, Implications, and Conclusion

5.1 Introduction

This chapter situates the findings of the study within broader theoretical debates in contact linguistics and the longitudinal research program on Dawoodi, discusses the implications of the analysis for language documentation and revitalization, and draws conclusions about the theoretical and empirical contributions of the study.

5.2 Contact-Induced Change and the Erosion-Adaptation Tension

The central theoretical tension that this study has engaged is the relationship between contact-induced change as erosion and as adaptation. The findings support a position that holds both dimensions simultaneously. The quantitative data — increasing borrowing rates, progressive loss of Matrix Language status, phonological and syntactic convergence — provides clear evidence of structural erosion. The direction of change is consistent with the trajectory toward post-creole collapse theorized in earlier research (Ishfaq & Bhatti, 2021), and the present study provides micro-level evidence of the contact-induced mechanisms through which that collapse is being produced. At the same time, the qualitative analysis of code-switching patterns reveals the adaptive dimension. Topic-related and identity-marking switching demonstrate that Dawoodi speakers are not passive recipients of contact pressure but active navigators of a complex multilingual landscape. Their hybrid speech practices reflect communicative intelligence and social awareness, not simply deficiency. This dual reality must be held in view simultaneously if the community's situation is to be understood fully and responded to appropriately.

This finding extends and complicates the theoretical framework of post-creole collapse developed in Ishfaq and Bhatti (2021). Structural collapse is not a uniform process in which all contact-induced changes are equivalent in their causes and consequences. The present study reveals a differentiated picture in which some contact-induced changes reflect speaker choice and adaptive creativity while others reflect competence limitations that are themselves consequences of the structural conditions — institutional exclusion, ideological devaluation, reduced transmission — documented in earlier research (Ishfaq & Bhatti, 2022). Disentangling these two dimensions is essential for both theoretical precision and practical intervention.

5.3 The Role of Code-Switching in Language Shift

The finding that younger Dawoodi speakers increasingly use Urdu as the morphosyntactic matrix of their utterances, with Dawoodi elements inserted as embedded items, has significant theoretical implications for understanding the relationship between code-switching and language shift. Myers-Scotton (2002) argues that this structural reversal — the heritage language moving from Matrix to Embedded Language status — is a key indicator of advanced language shift, representing not merely the influence of a dominant language on a heritage language but the incipient replacement of the heritage language's grammatical system.

In the Dawoodi context, this structural reversal is not yet complete — Dawoodi morphosyntax still functions as matrix in many utterances, particularly in elder and middle-generation speech — but its increasing presence in younger speaker data suggests that the shift is progressing at the structural level as well as the lexical level documented in earlier research. This finding has implications for how preservation and revitalization efforts prioritize their interventions: if the

grammatical system is under pressure as well as the lexicon, documentation and pedagogy must attend to structural features as well as vocabulary.

5.4 Situating Contact-Induced Change within the Longitudinal Framework

The present study completes an important analytical dimension of the longitudinal research program on Dawoodi by providing the micro-level contact mechanism that underlies the macro-level processes documented in earlier work. The trajectory documented across the series can now be understood with greater precision.

Language shift (Ishfaq & Bhatti, 2019) is produced in part by the progressive domain restriction and generational transmission breakdown that contact with dominant languages, institutionally privileged and ideologically valorized, makes increasingly difficult to resist. Lexical attrition (Ishfaq & Bhatti, 2020) is produced in part by the borrowing and replacement processes documented in the present study, which displace Dawoodi lexical items — particularly culturally embedded, low-frequency terms — with dominant language equivalents. Post-creole collapse (Ishfaq & Bhatti, 2021) is produced by the cumulative structural convergence that the present study has traced at the phonological, lexical, and syntactic levels. And the linguistic hegemony analysis (Ishfaq & Bhatti, 2022) explains why these contact-induced processes are asymmetric, directional, and intensifying: because the power relations that structure the multilingual ecology consistently favor dominant languages over Dawoodi.

Together, these five studies constitute a comprehensive account of Dawoodi's situation that moves from social conditions (hegemony) through psycholinguistic processes (attrition) and micro-linguistic mechanisms (contact-induced change) to macro-level outcomes (shift, collapse). This integration is the primary theoretical contribution of the longitudinal program as a whole.

5.5 Implications for Documentation and Revitalization

The findings of this study have specific implications for how documentation and revitalization efforts for Dawoodi are designed and conducted. Most fundamentally, they support the argument made in the introduction: that documentation should aim to capture the language as it is actually used rather than as prescriptive norms dictate it should be. Hybrid speech practices, code-switching patterns, and contact-influenced forms are not corruptions to be excluded from documentation but features of living Dawoodi that must be recorded if the documentation is to represent the language accurately and usefully.

This has practical implications for documentation methodology. Recordings that capture naturalistic, spontaneous speech — including mixed, switched, and hybrid utterances — are more valuable representations of the current state of Dawoodi than elicited productions that may encourage speakers to produce more conservative, idealized forms. Documentation that captures the full range of Dawoodi speech behavior, including its contact-induced dimensions, also provides a more useful baseline against which future change can be measured.

For revitalization, the findings suggest that efforts focused solely on reinstating "pure" Dawoodi forms are likely to be both linguistically unrealistic and socially counterproductive. Effective revitalization must work with the hybrid repertoires that community members actually possess, building on the Dawoodi elements they retain and extending them rather than requiring speakers to abandon the contact-influenced practices that reflect their multilingual reality. This is consistent with translanguaging approaches to heritage language education (García & Wei, 2014) that build on learners' full linguistic repertoires rather than treating the heritage language as an isolated object to be acquired from scratch.

5.6 Theoretical Contribution: Toward a Model of Endangered Language Contact

The Dawoodi case contributes to contact linguistics by demonstrating that the study of contact-induced change in endangered languages requires a theoretical framework that can hold together several dimensions that are often treated separately. These include the structural dimension (what kinds of features are transferred, in what direction, through what mechanisms), the social dimension (what power relations shape the directionality and intensity of contact), the cognitive dimension (how reduced frequency of use affects speaker access to heritage language forms), the functional dimension (what communicative purposes contact-induced practices serve for individual speakers), and the temporal dimension (how patterns of contact-induced change evolve across generations and interact with other processes of language decline).

No single existing theoretical framework encompasses all these dimensions. The present study has drawn on Thomason and Kaufman (1988), Myers-Scotton (1993; 2002), Mufwene (2001), and others to address different aspects of the Dawoodi case, and the integration of these perspectives produces a richer account than any single framework could offer. This integrative approach may serve as a model for future research on contact-induced change in other endangered languages.

5.7 Limitations of the Study

The corpus, while carefully compiled, is necessarily limited by the small size of the Dawoodi-speaking population and the logistical challenges of recording natural speech in a community where the language is endangered. Some speech contexts that would be theoretically valuable — formal public speech in Dawoodi, domain-restricted ceremonial usage — could not be adequately captured due to their rarity. The analysis of structural convergence, while systematic, could be extended with more detailed phonological analysis than was possible within the scope of this study.

5.8 Directions for Future Research

Future research should examine the phonological dimension of contact-induced change in greater detail, comparing elder and younger speaker phonological systems systematically to document the extent and nature of Urdu-influenced phonological restructuring. Research on the pragmatic functions of code-switching, drawing on interactional analysis of recorded conversations, would deepen understanding of how speakers use language contact as a resource. Comparative research examining contact-induced change in other endangered languages of northern Pakistan could identify whether the patterns documented for Dawoodi are specific to its ecology or reflect regional dynamics of linguistic change. Finally, longitudinal tracking of the same speakers over time would provide insight into how individual linguistic repertoires change as the community situation evolves.

5.9 Conclusion

Languages are changed by the contacts they sustain. For Dawoodi, the contacts of recent decades — with Urdu above all, but also with Burushaski, Shina, and the globalizing forces of media and education — have produced a language whose current form is inseparable from its history of contact. The borrowings, switchings, and convergences documented in this study are not external to Dawoodi but are constitutive of it as a living language, spoken by real people navigating real multilingual worlds.

To document these contact-induced dimensions of Dawoodi is not to concede to its decline. It is to take seriously the language as it exists rather than as we might wish it to be. It is to recognize that the speakers who produce hybrid, switched, borrowed forms are not failing Dawoodi but using it, adapting it, carrying it with them into a social world that has not made their task easy.

The longitudinal research program of which this study forms a part has traced Dawoodi's trajectory across five dimensions: from the social conditions of hegemony that frame its situation, through

the intergenerational disruption that threatens its transmission, the lexical erosion that depletes its expressive resources, the structural collapse that threatens its grammatical integrity, and now the contact-induced processes through which all these transformations are enacted in speech. Together, these studies constitute a comprehensive account not only of one language's endangered situation but of the multiple, interlocking forces through which languages are silenced. Understanding these forces is the first step toward challenging them.

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